

# **THE SORCERER\*** ...



- A source data collection system
- A recording calculator
- An off-line "smart" terminal
- A key-tape converter
- A uniquely useful device in a class by itself

\*SORCERER: (n.) An intelligent source data collection terminal consisting of keyboard, printer, processor, tape drive, and modem. Self-contained in a portable, compact take-anywhere package at a price you can afford.

## **TRANTI SYSTEMS, INC.**

## FEATURES

- Built-in electronic printing calculator for versatile general-purpose figuring. Special calculation programs can be wired in for single-keystroke operation. Calculator includes 4 extra storage registers, provides 9-digit input and printout.
- Built-in telephone modem with automatic telephone answering capability. Keyboard data and calculated results may be stored on tape for computer processing at low-cost off-peak hours. The computer can call the Sorcerer in the night and collect your recorded data—the Sorcerer answers the phone and transmits the data automatically, unattended.
- Built-in programming allows the Sorcerer to be tailored to perform individual applications most efficiently. The program can guide the operator, improve the accuracy of data, and expedite the computer's routines.
- Specially-developed electronic circuits minimize the risk of errors from double-keystroke inputs, missing or extra digits, incorrect codes, or inaccurate recording.
- Carefully-planned alarm circuits signal an operator error with an audible "beep", the keyboard locks out further data entry, and one of 8 error lamps is lit with a legend to inform the operator of the nature of his error. The Sorcerer provides unmatched verification and operator guidance features.
- Human engineered for just the right keyboard touch, small size, and lightweight. Operates over a broad range of temperatures and tolerates unregulated standard 115 volt AC power line input for general field use without fuss or bother. The Sorcerer is so easy to use that little or no operator training is required.
- Off-line data collection with extensive check and verification routines, and subsequent high-speed batch processing, provides most efficient and error-free computer operation. The Sorcerer eliminates intermediate data preparation steps, provides fast data transmission, cuts computer bottlenecks, and lowers data entry costs.

## GENERAL DESCRIPTION

All information entered on the keyboard is printed on paper tape for permanent record and recorded on a magnetic tape cassette for later transmission to a central computer through an integral modem.

A unique, self-contained processor provides full calculator capabilities, operator guidance and monitoring, tape control and formatting.

The processor includes a read-only memory which is microprogrammed to tailor the Sorcerer for your particular system. Applications include accounting, inventory control, point of sale, and "fast food".

Standard operating modes are RECORD, LIST, CALCULATE, VERIFY, and TRANSMIT.

## COMPONENTS

### KEYBOARD

Custom key layout to suit your application. Typewriter style and feel with tactile feedback. Unique electronic design provides N-key rollover and double key lockout. Error-free performance even at keypunch and adding machine operator speeds.

### PRINTER

Prints in 21 columns at three lines per second. Black with red shift available. Standard 3½ inch adding machine paper. Also available: Alpha output, split platen (two tapes), pin feed, fan fold, card inserts, and multiple copies.

### TAPE DRIVE

Uses standard Phillips cassettes, 300 ft. reels. Conservatively rated at 60,000 digits of stored data per reel. Utilizes block formats. Read after write optional.

### PROCESSOR

All IC, TTL logic with generous use of advanced medium scale

integration. MOS memory provides 8 registers and 128 digit tape buffer. Processor controlled by MOS ROM (read-only memory) microprogrammed to suit customer requirements. Read/Write programmable memory available for demonstrations and tests. Standard processor features include all four calculator functions—add, subtract, multiply, and divide, up to 12 digit numbers with sign, storage registers, multiple accumulators, and a tape buffer. The processor provides operator guidance, input format control, check digit verification, and error alarms. It also provides tape control, block formatting, line and block parity generation, block numbering, read after write checking, and tape verification.

### MODEM

Direct access to phone lines standard; interface to data set, and acoustic coupling optional. 300 or 1200 baud through dial-up network. 11 bit teletype format standard. Unattended automatic answering. Wide dynamic range.

### GENERAL

Compact and rugged. 13"W x 7"H x 20"D. Weight 35 lbs.



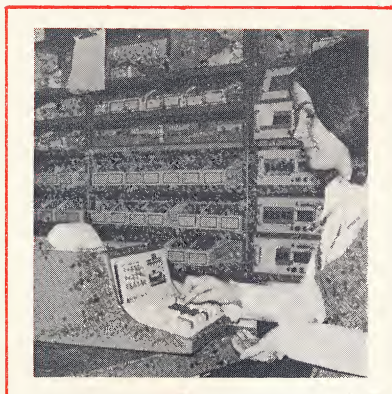
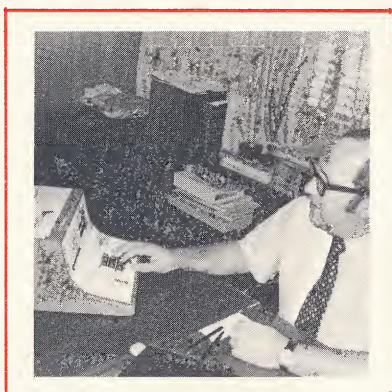
## APPLICATIONS

### ACCOUNTING

Operator enters account numbers, and assorted control and category numbers. Then, debit and credit entries. Dollar total is maintained on debit/credit entries. Hash totals are maintained on non-dollar entries. Account and control numbers are checked for validity using "Duns" check digit method. All entries are recorded on tape. Tape data is formatted in blocks of about 100 digits. Parity digit added to each line entered. Two parity digits are added to each block.

The processor monitors operator, allows only 9 data digits per line. Error alarms warn of check digit failure, end of tape, and illegal operations.

The operating modes are RECORD for preparing tapes, LIST for printing tape contents, CALCULATE for scratch pad addition, subtraction, multiplication, and division, and TRANSMIT for unattended polling.



### FAST FOOD

Keys are designated by item, i.e., "hamburger", "hot dog", etc. Operator keys in order: 3 hamburgers, 1 coke, etc. Sorcerer tallies bill and tax and prints all. Operator keys in amount tendered, Sorcerer calculates and prints change. Processor capability allows complicated tax calculations, i.e., no tax if total under \$1.00, etc. Special modifier keys such as delete, large, and small are possible, to allow DELETE 2 HAMBURGER or LARGE COKE.

All items are recorded on tape. Totals are available for all items, receipts, and taxes. Tapes are read later by computer via phone lines to provide inventory control, trend analysis, and operator efficiency analysis. System maintains paper tape and magnetic tape records.

### INVENTORY CONTROL

All items received or distributed are keyed onto tape. Computer reads tape at night, updates inventory records, reorders.

In supermarkets, clerk scans shelves, keys in items to be replenished. Computer at warehouse calls terminal at night, ships items next day, bills automatically. Store clerk is "keypuncher".

### POINT OF SALE

Clerk keys in item number, credit card number. Transaction is recorded for automatic billing, inventory control. Processor totals bill and computes change if cash sale. Optional auto-call for credit check is possible.

The SORCERER is readily adapted for a variety of applications. It uniquely offers the optimum balance between on-site and service bureau operations. To learn more about the SORCERER, and investigate how it can improve the efficiency of your operations, please call or write:

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